

METERS



pH-1 micro

The pH-1 micro is a precise fiber optic pH meter. It is temperature compensated and used with pH microsensors based on a 140 μm optical fiber. A PC is connected to run the user-friendly software. pH-1 micro is additionally equipped with an analogue output and a trigger input.

- For use with pH microsensors
- Simple one-point calibration possible
- Software included

TECHNICAL

| Specifications | | |
|-------------------------------------|---|--------|
| pH sensors | HP5 | |
| Temperature sensor | 1 x Pt1000 temperature connector (sensor included) | |
| Temperature performance | 0 °C to + 50 °C, resolution ± 0.1 °C, accuracy ± 1.0 °C | |
| Power supply | 18 VDC / 5 W (110 - 240 VAC, 50/60 Hz, adapter included) | |
| Temperature: operating / storage | 0 °C to + 50 °C / - 10 °C to + 60 °C | |
| Relative humidity | up to 80 % (non condensing) | |
| Dimensions | 210 mm x 120 mm x 50 mm | |
| Weight | 0.65 kg | |
| Digital interface | RS232 interface (with RJ connector to serial port, cable included) | |
| External trigger | TTL compatible with galvanic isolation (BNC connector) | |
| | Dual outputs, 0 - 4.095 mV, resolution 12 bit, accuracy ± 10 nV (BC connectors) | |
| | 10 mV represent | |
| Analogue output specifications | pH | 0.1 pH |
| | Temperature | 1 °C |
| | Phase | 0.25 ° |

SENSORS



Needle-type pH Microsensor NTH-HP5

The NTH-HP5 is designed for measuring in small volumes. The sensor is based on a 140 μm silica fiber which enables integration into manifold small scale environments. With its protective syringe needle housing the NTH-HP5 can easily penetrate tissue, septum rubber or packaging materials. After penetration the sensor tip is extended for measurements.

- High spatial resolution
- Measurement in smallest volumes
- Profiling of pH gradients
- Integration into plant and animal tissue
- Optimized for culture media and physiological solutions

TECHNICAL

Specifications*

| | |
|-------------------------------|--|
| Measurement range | 5.5 - 8.5 pH |
| Resolution | at pH = 7: ± 0.02 pH |
| Accuracy | at pH = 7: ± 0.1 pH with sensor calibration |
| Drift | at pH = 7: < 0.05 pH per day (sampling interval of 1 min.) |
| Measurement temperature range | from + 5 to + 50 °C |
| Response time (t_{90}) | at 25 °C: < 30 sec. |

Properties*

| | |
|-------------------------|--|
| Compatibility | Aqueous solutions, ethanol (max. 10 % v/v), methanol (max. 10 % v/v), pH 2- 10 |
| No cross-sensitivity | Electrical fields, proteins |
| Cross-sensitivity | Reduced to ionic strength (salinity); a high concentration of small fluorescent molecules in the visible range can interfere |
| Sterilization procedure | Ethylene oxide (EtO), recalibration recommended |
| Cleaning procedure | Water, Acrylan, pepsin solution |
| Calibration | pH sensors are pre-calibrated; recalibration is possible |
| Storage stability | 24 months provided the sensor is stored in the dark |

* provided pH sensors are used without further handling in physiological solutions

ACCESSORIES



Manual Micromanipulator MM

The Manual Micromanipulator MM is specifically designed for PreSens needle-type microsensors (NTH). The system allows moving the microsensor vibration-free in 3 axes with μm reading accuracy. A solid base plate ensures a stable set-up of the micromanipulator and enables safely tilting the whole system up to 90° - so you can use it in any required position. With the safe-insert function the microsensor retracted in its steel needle can be securely inserted into your area of interest. The sensor tip can then be extended delicately and safely with μm reading accuracy, without risk of breaking the sensor fiber.




- Safe-insert function for retractable microsensors
- 90° tilting mechanism
- Specifically designed for PreSens microsensors
- Vibration-free micromanipulation in 3D
- Fine drive with μm reading accuracy
- Solid base plate for most stable set-up

TECHNICAL

Specifications

| | |
|--------------------|---|
| Compatibility | Needle-type Housed (NTH), Profiling (PM) and Implantable (IMP) oxygen & pH microsensors |
| Dimensions | 230 mm x 130 mm x 200 mm |
| Weight | Weight w/o base plate: 1,1 kg Weight with base plate: 3 kg |
| Travel range | x-axis: 37 mm, fine drive: 10 mm y-axis: 20 mm z-axis: 25 mm |
| Reading accuracy | Coarse adjustment: 0.1 mm Fine adjustment: 0.01 mm |
| Coarse positioning | x-axis: 70 mm |
| Rotability | 360° |
| Material | Aluminum & steel |

GET IN CONTACT

-  **Request more info**
-  **Request a quote**
-  **Rent-a-meter**

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